

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

Form C-101
August 1, 2011
Permit 164505

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

| | | |
|---|--|-------------------------------|
| 1. Operator Name and Address COG OPERATING LLC One Concho Center Midland, TX 79701 | | 2. OGRID Number 229137 |
| 4. Property Code 39784 | | 3. API Number 30-025-41080 |
| 5. Property Name CROCKETT STATE | | 6. Well No. 002H |

7. Surface Location

| UL - Lot | Section | Township | Range | Lot Idn | Feet From | N/S Line | Feet From | E/W Line | County |
|----------|---------|----------|-------|---------|-----------|----------|-----------|----------|--------|
| H | 20 | 21S | 33E | H | 2310 | N | 190 | E | LEA |

8. Proposed Bottom Hole Location

| UL - Lot | Section | Township | Range | Lot Idn | Feet From | N/S Line | Feet From | E/W Line | County |
|----------|---------|----------|-------|---------|-----------|----------|-----------|----------|--------|
| E | 20 | 21S | 33E | E | 2260 | N | 330 | W | Lea |

9. Pool Information

| | |
|----------------------------------|-------|
| WC-025 G-08 S213304D BONE SPRING | 97895 |
|----------------------------------|-------|

Additional Well Information

| | | | | |
|---------------------------|-----------------------------|--|-------------------------|------------------------------------|
| 11. Work Type New Well | 12. Well Type OIL | 13. Cable/Rotary | 14. Lease Type State | 15. Ground Level Elevation 3724 |
| 16. Multiple N | 17. Proposed Depth 16373 | 18. Formation Bone Spring | 19. Contractor | 20. Spud Date 5/1/2013 |
| Depth to Ground water | | Distance from nearest fresh water well | | Distance to nearest surface water |

21. Proposed Casing and Cement Program

| Type | Hole Size | Casing Type | Casing Weight/ft | Setting Depth | Sacks of Cement | Estimated TOC |
|------|-----------|-------------|------------------|---------------|-----------------|---------------|
| Surf | 17.5 | 13.375 | 54.5 | 1740 | 1035 | 0 |
| Int1 | 12.25 | 9.625 | 36 | 5240 | 1930 | 0 |
| Prod | 7.875 | 5.5 | 17 | 16373 | 1790 | 4940 |

Casing/Cement Program: Additional Comments

Plan to drill 17 1/2" hole to 1740' w/fresh water. Run 13 3/8" 54.5# J55 STC csg & cmt to surf with 1035 sx cmt. Drill 12 1/4" hole to 5240' w/brine. (If losses occur in the Reef, plan to switch to fresh water to interval TD.) Run 9 5/8" 36# J55 & 40# N80 BTC csg and cmt w/DV/ECP tool placed 100' above the Reef to insure good coverage across salt intervals. Plan to circulate cmt on both stages. Drill 7 7/8" pilot hole to 12100', log and plug back with cement plug f/ 11100' - 12100'. Drill 7 7/8" curve and lateral to 16373' w/cut brine. Run 5 1/2" 17# P110 LTC casing to TD and cement to 4940' (300' overlap) in one stage.

22. Proposed Blowout Prevention Program

| Type | Working Pressure | Test Pressure | Manufacturer |
|-----------|------------------|---------------|--------------|
| DoubleRam | 3000 | 3000 | Cameron |
| DoubleRam | 5000 | 5000 | Cameron |

| | |
|--|---|
| 23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify I have complied with 19.15.14.9 (A) NMAC <input checked="" type="checkbox"/> and/or 19.15.14.9 (B) NMAC <input checked="" type="checkbox"/> if applicable. Signature: _____ Printed Name: Electronically filed by Diane Kuykendall Title: Production Reporting Mgr Email Address: dkuykendall@conchoresources.com Date: 3/28/2013 | OIL CONSERVATION DIVISION Approved By: Paul Kautz Title: Geologist Approved Date: 4/2/2013 Expiration Date: 4/2/2015 Conditions of Approval Attached |
|--|---|

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State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

Form C-102
August 1, 2011
Permit 164505

WELL LOCATION AND ACREAGE DEDICATION PLAT

| | | |
|-------------------------------|---------------------------------------|--|
| 1. API Number 30-025-41080 | 2. Pool Code 97895 | 3. Pool Name WC-025 G-08 S213304D;BONE SPRING |
| 4. Property Code 39784 | 5. Property Name CROCKETT STATE | 6. Well No. 002H |
| 7. OGRID No. 229137 | 8. Operator Name COG OPERATING LLC | 9. Elevation 3724 |

10. Surface Location

| | | | | | | | | | |
|---------------|---------------|-----------------|--------------|--------------|-------------------|---------------|------------------|---------------|---------------|
| UL - Lot H | Section 20 | Township 21S | Range 33E | Lot Idn H | Feet From 2310 | N/S Line N | Feet From 190 | E/W Line E | County LEA |
|---------------|---------------|-----------------|--------------|--------------|-------------------|---------------|------------------|---------------|---------------|

11. Bottom Hole Location If Different From Surface

| | | | | | | | | | |
|-------------------------------|---------------|---------------------|--------------|------------------------|-------------------|---------------|------------------|---------------|---------------|
| UL - Lot H | Section 20 | Township 21S | Range 33E | Lot Idn H | Feet From 2260 | N/S Line N | Feet From 330 | E/W Line W | County LEA |
| 12. Dedicated Acres 160.00 | | 13. Joint or Infill | | 14. Consolidation Code | | 15. Order No. | | | |

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

| | | | | | | | | | | | | | | | | | |
|--|--|--|--|--|---|--|--|--|--|--|--|--|--|--|--|--|--|
| <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <tr><td style="width: 25%; height: 40px;"></td><td style="width: 25%; height: 40px;"></td><td style="width: 25%; height: 40px;"></td><td style="width: 25%; height: 40px;"></td></tr> <tr style="background-color: #cccccc;"> <td style="height: 40px;">■</td><td style="height: 40px;"></td><td style="height: 40px;"></td><td style="height: 40px;"></td></tr> <tr><td style="height: 40px;"></td><td style="height: 40px;"></td><td style="height: 40px;"></td><td style="height: 40px;"></td></tr> <tr><td style="height: 40px;"></td><td style="height: 40px;"></td><td style="height: 40px;"></td><td style="height: 40px;"></td></tr> </table> | | | | | ■ | | | | | | | | | | | | <p style="text-align: center;">OPERATOR CERTIFICATION</p> <p><i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location(s) or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</i></p> <p>E-Signed By: Diane Kuykendall Title: Production Reporting Mgr Date: 3/28/2013</p> <hr/> <p style="text-align: center;">SURVEYOR CERTIFICATION</p> <p><i>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</i></p> <p>Surveyed By: CHAD HARCROW Date of Survey: 2/12/2013 Certificate Number: 17777</p> |
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Permit Comments

Operator: COG OPERATING LLC , 229137

Well: CROCKETT STATE #002H

API: 30-025-41080

| Created By | Comment | Comment Date |
|------------|---|--------------|
| pkautz | Drilling resticteddue to Potash | 3/25/2013 |
| pkautz | Land s/S | 3/25/2013 |
| pkautz | Rejected operator will need to resubmit and add a salt protection string per R-111P requirements. | 3/25/2013 |
| CHERRERA | OCD RECEIVED FORM C144 CLEZ OCD PERMIT # P1-05958 | 3/28/2013 |
| CHERRERA | Potash letters from BLM and SLO attached. | 3/28/2013 |

Permit Conditions of Approval

Operator: COG OPERATING LLC , 229137

Well: CROCKETT STATE #002H

API: 30-025-41080

| OCD Reviewer | Condition |
|-----------------|--|
| pkautz | Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string |
| pkautz | In order to seal off protectable water, the surface casing must be set 25' below top of Rustler Anhydrite. |